

April 21, 2003

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

BUREAU OF HIGHWAY DESIGN

CONFERENCE REPORT
*[revised 4/21/03: see *italics* on page 2]*

PROJECT: Jefferson-Randolph
NHS-X-0341(018)
13602

DATE OF CONFERENCE: March 26, 2003

LOCATION OF CONFERENCE: Jefferson Town Hall

ATTENDED BY: NHDOT

R. Maddali	G. Placy	M. Dugas	K. Nyhan
J. McKay	A. Sanborn	V. Chase	

Others

L. Wilson (NHDHR)	S. Whitman (NHOSP)
W. O'Donnell (FHWA)	W. Staats (NH F&G)
G. Infascelli (NH Wetlands)	C. Russell (NH DES)
S. Doll (NCC)	

SUBJECT: Public Informational Meeting

NOTES ON CONFERENCE:

The evening informational meeting was preceded by two-hour open house sessions in both Randolph (AM) and Jefferson (PM). Approximately 12 residents attended each open house. Some of the input garnered from the attendees is noted below.

Randolph (AM open house)

- Mr. Almon Farrar: noted the presence of ledge along his frontage; his well and septic system are located next to his house; he noted that the easterly drive on his property on the south side of US 2 is no longer used and a connection is not needed.
- Ms. Jean Malick: will consider the layout for the proposed driveway; she may want to relocate driveway to the east side of the house.
- Mr. Robert Kruczyna: is not impacted by improvements; expressed support for underpass near Lowe's.

Jefferson (PM open house)

- Mr. and Mrs. Hurzeler: expressed support for 1.2m (4 feet) shoulders; asked for details of ROW acquisition.
- Mr. Danny Vaillancourt: garage is very close to road; could nearest edge of pavement be held as a control? M. Dugas answered that this request would be studied.
- Mr. Michael Sewick: explained that there is substantial runoff that flows from the hillside south toward US 2; the road improvements should accommodate this water.

R. Maddali opened the informational meeting by reviewing the project limits and development of the US 2 improvement project from the inception of the corridor study to the current status of the design work. R. Maddali briefly reviewed the results of the April 2002 workshop and the November 2002 Public Officials Meeting. He noted that as a result of the Public Officials meeting, two additional bypass options have been studied. Pending a positive outcome of this meeting, the Department anticipates proceeding to a Public Hearing in late Summer 2003. Construction is currently scheduled to begin in 2006.

K. Nyhan presented a summary of the natural and cultural resources that are present within the corridor and the protection that is provided them by federal and state regulations. He also explained the scope of the ongoing wildlife study by Louis Berger Group. He explained that in order to consider the viability of avoiding impacts to the Jefferson Highlands historic district, two avoidance alternatives have been developed. One alternative would bypass the district to the south (Alternative C) and one to the north (Alternative D). A matrix has been prepared to summarize the scope of work and quantify and qualify the environmental and cultural impacts caused by these two alternatives and the two alternatives discussed at the public officials meeting (online improvements – Alternative A, and Highlands bypass - Alternative B). He noted that both Alternative C and D have been eliminated from further consideration. Alternative D would traverse very severe terrain in passing near the summit of Bois Mountain. Alternative C would descend into the Israel River valley requiring two bridges over the river and two crossings of Valley Road. He explained that the alternatives were reviewed with the Natural Resource Agencies on 3/19/03 at which time the Agencies' representatives were nearly unanimous in their opinion that Alternative A (online improvements) was preferable because it would be less damaging to the environment. *As wetlands have not yet been mapped, a gross comparison of potential wetland impacts was discussed. Minimal ditch-type impacts would be incurred with the online improvement. Minor impacts would be expected with both Alternatives B & D, associated with intermittent and perennial stream crossings. Major impacts would be expected with Alternative C, associated with two (2) crossings of the Israel River and associated floodplain areas.*

J. McKay described the cultural, including both historic and prehistoric, resources within the project limits, and described the efforts thus far to locate and minimize the impacts upon those assets. She noted that the environmental study being undertaken by the Louis Berger Group has identified several "areas of concern" within the corridor of Alternative B. These areas would need to be investigated further for archeological remains if Alternative B were selected as the preferred alternative.

M. Dugas outlined the existing conditions and roadway deficiencies. The current posted speed limit is 50 mph through the project limits. The average daily traffic volume of 4,700 vehicles per day is projected to increase to 6,300 in 2025 and includes 20% trucks. Much of the roadway has little or no formal paved shoulders except in those areas that were improved more recently, including the vicinity of Valley Road and the segments of US 2 east of the Bowman Inn and immediately east of NH 115. Additionally, US 2 suffers from very poor vertical geometry particularly the segments near the Carter Spring and immediately east of Valley Road. With the exception of the deficient reversing curves near the Bowman Inn, the horizontal geometry satisfies the requirements of the 50 mph posted speed. The existing right of way within Jefferson is 66' wide and within Randolph is 50' wide.

M. Dugas explained that the design effort has investigated both an online option and a potential bypass of Jefferson Highlands.

Online alternative

As presented at the 11/2002 public officials meeting, the initial design approach was to apply a 50 mph design speed throughout the project limits and construct 4' wide shoulders within the Highlands and perhaps wider shoulders elsewhere. The current proposal has been modified to reduce impacts, particularly within the Highlands, but also elsewhere within the project limits. A reduced design speed of 40 mph is proposed within the Highlands to minimize impacts within the historic district. Also, curbing would be installed wherever advantageous to avoid impacts to stonewalls and calm traffic. Despite these efforts, some stonewalls will likely be impacted by the improvements. These walls will be rebuilt.

As explained at the 11/2002 meeting, wider shoulders could be considered east of the Highlands. Some attendees at the 11/2002 meeting had felt that 10' shoulders would be the safest alternative while others felt that wide shoulders would lead to significantly increased travel speeds and undue property impacts. In consideration of the concerns, the current alternative proposes to construct 4' wide shoulders throughout the project limits for the following reasons:

1. Four feet is the minimum shoulder width that would safely accommodate bicycles and pedestrians, a key goal of the project,
2. Narrow shoulders would limit the speed increase that could result from the addition of shoulders to the roadway, and
3. Narrow shoulders would minimize the property impacts due to construction.

M. Dugas summarized that the use of 4' shoulders, rather than 10' shoulders, would clearly signify to drivers that this segment of US 2 is distinctly different from the abutting highway segments to the east and west. M. Dugas described some key improvement areas:

- Carter Spring: The proposed profile improvement would raise the elevation of the sag by approximately 1.5m (5'). Avoiding impacts to the Spring would necessitate shifting the roadway centerline approximately 10m (33') to the south. This shift may allow the construction of a pull-off area on the north side of US 2 for access to the spring. East of Carter's Cut Road the proposed profile adjustment would require that the Wells driveway be relocated approximately 30m (100') east to provide an acceptable grade.

- East of Valley Road: The crest of the hill would be lowered by approximately 1.2m (4') requiring the roadway to be shifted 7.5m (25') south to avoid impacts to the Farrar and Webster driveways along the north side of US 2.
- Bowman 's' curve: US 2 would be shifted 8m (26') north in front of the Randolph Fire Department building to permit greater separation between the two reversing curves and meet the 50 mph design criteria.

The proposed right of way for the improved US 2 would be 66' wide. Within Randolph (where the existing right of way is less than 66' wide) and where the roadway will be shifted from its existing location, land will need to be acquired from the abutting property owners. Also, to fulfill the Towns' request for access management along the US 2 corridor, access will be controlled within the project limits to prevent the future proliferation of driveways. M. Dugas explained that controlled access means an appropriate number of access points will be granted to each abutting property.

Jefferson Highlands bypass

This alternative would pass south of the Highlands, beginning in the vicinity of the NH 115 intersection with US 2 and rejoining US 2 immediately east of the Water Wheel restaurant. The bypass would extend approximately 3.5 km (2.4 miles) and would generally follow the contour of the hillside, reaching a maximum separation from the existing US 2 of approximately 450m (1,500'). Connections from the bypass to the existing US 2 would be provided at both ends of the bypass. The steep grade of the east end of the bypass alignment would require the construction of a climbing lane from the vicinity of the crossing of Carter's Cut Road to immediately east of the Water Wheel. Upon completion of the bypass, the bypassed segment of the existing US 2 would revert to Town ownership and maintenance. Also, to minimize the secondary impacts that could be caused by development occurring along the new roadway, a limited access right of way is proposed for the bypass. No driveways would be permitted from the new roadway and the entry/exit points will be at the NH 115 and Water Wheel intersections. Rather, access to abutting land would be via the current US 2.

Other design elements

M. Dugas also explained that the design is considering the placement of a scenic overlook along US 2 immediately west of the Alpine Forest Motel on the south side of US 2. Finally, the three snowmobile trail crossings within the project limits are being studied for the feasibility of constructing underpasses. The underpasses would serve snowmobiles and, at the crossing just east of Lowe's Store, hikers. The underpass near Lowe's Store appears feasible. The underpasses near the Oleson property (west end of project) and near the Jefferson / Randolph town line will be studied further.

Questions and comments

- Will Staats, NH Fish and Game said his agency is opposed to the Jefferson Highlands bypass option.
- An attendee identified as a resident of Lancaster stated that widening the shoulders beyond the proposed four feet would provide greater safety. M. Dugas agreed that wider shoulders would have a greater safety benefit, but reiterated that the selection of the four-

foot width was a compromise between the need to improve safety while minimizing the property impacts of the roadway construction and the speed increases that could result.

- Malcolm Call reviewed the information on the matrix handout and noted his support of the bypass.
- Mr. Bob Ball (Jefferson Conservation Commission) stated his opposition to the Highlands bypass and explained the possible impacts that the bypass would have on the environment.
- Mrs. Esther Estabrooks suggested that the State assume ownership of the project and widen both Valley Road and Carter's Cut Road to relieve traffic on US 2.
- An attendee suggested that the US 2 speed limit be reduced now. G. Placy answered that his office if requested by the Selectmen would study this. The study would evaluate the geometry of the roadway, the existing travel speeds of the traffic and the level of speed enforcement that has been applied to the road. Michele Ward (Chairman of Jefferson Selectmen) expressed her support to make this request.
- Ms. Michele Ward (Chairman of Jefferson Selectmen) expressed her opposition to the Highlands bypass alternative citing the added cost to the town to maintain the bypassed segment of US 2.
- Ms. Joanna Ryan stated that the Highlands bypass alignment would impact existing deer-yards near the US 2 / NH 115 intersection. Will Staats concurred.
- Mr. Jim Meiklejohn (Randolph Conservation Commission) expressed his support for the planned improvements but noted his concern that the addition of shoulders to the roadway would result in higher operating speeds.
- Mr. Alan Lowe (Randolph Police Chief) recommended that the town garage be removed and the Bowman 'S' curve thereby be improved. He felt that the proposed design did not go far enough in addressing the current deficiencies at that location.
- Mr. Kevin Arakelian (Water Wheel) felt that if the Highlands bypass were built the Town would need to prohibit trucks from the bypassed segment of road and wanted to know who is going to stop trucks going through the historical district. He also asked if the presence of a historic district always requires a bypass alternative and he expressed concern with the proposed eastbound climbing lane and its impact on left turns onto the bypassed portion of US 2 and into the Water Wheel driveway. L. Wilson responded that the presence of historic resources requires that the Department investigate alternatives to minimize the impact. Sometimes those studies indicate that a bypass is the least damaging alternative. M. Dugas noted that the grades on US 2 and bypass are similar. Regarding the climbing lane, M. Dugas answered there are safety concerns wherever left turns are made from a climbing lane. The shoulder could be widened to accommodate right turns into the two noted locations, if warranted. Greg Placy, District Engineer, noted that trucks couldn't be prohibited from the state highway system.
- An attendee asked if the State could retain ownership of the bypassed portion of US 2 if the bypass alternative were built. A. Sanborn responded that RSA 228:36 states that the Commissioner of NHDOT may reclassify bypassed segments of roadway as Class V (town maintained). This law has been consistently applied in recent years where whenever a bypassed portion of a State highway is no longer needed on the State highway system, it is relinquished to the town.

- Mr. Jim Brady expressed concern regarding the location within the Highlands bypass alternative of the westerly connector to the bypassed portion of US 2. Locating the connector opposite NH 115 would add traffic to an area already prone to moose collisions. K. Nyhan responded by describing the ongoing wildlife study. Will Staats commented that the construction of a bypass would place one more barrier in the way of migrating animals and could lead to increased mortality. G. Placy discussed some of the innovative systems that are being studied to alert motorists to the presence of animals within or near the roadway.
- Mr. Tom Brady felt that the proposed alignment, being located significantly lower than the existing road would be a sterile roadway devoid of the views along the existing roadway. L. Wilson responded that signs could be placed on the bypass to direct travelers to the historic district. She suggested that the State retain the bypassed segment of US 2 as "Scenic Route 2."
- Mrs. Esther Estabrooks asked that the design work be expedited to begin construction as soon as possible. She feared that any delays could lead to the construction funding being redirected to other large projects, such as the I-93 widening.
- There was a discussion on the Randolph Fire Department building and it was noted that the building would not be impacted by this project.
- One of the attendees noted that US 2 goes through the Highlands and that is where it should stay.

Submitted by:

Michael J. Dugas, P.E.
Preliminary Design Supervisor

MJD:mjd

cc: J. Brillhart, R. Maddali, K. Nyhan
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